

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A high-pressure discharge ~~lamp,~~
~~comprising:~~ lamp comprising:

a burner including a burner wall and a discharge chamber enclosed by said burner wall, wherein a region with a lowest temperature and a region with a highest temperature establish themselves at ~~the contour of the~~ burner wall during operation of the lamp and in dependence on the mounting position of the lamp, and

a multilayer interference filter which is provided on a portion of ~~an outer contour~~ a coldest part of the burner wall, ~~which wherein~~ interference filter reflects towards the discharge chamber mainly light in a wavelength range of infrared light, and ~~wherein the material of the burner wall has its maximum emissive~~

~~power and the material of the burner wall is not transparent to the infrared light~~ one layer of the multilayer interference filter includes at least one of niobium oxide, hafnium oxide, silicon nitride.

2. (Currently Amended) The high-pressure discharge lamp as claimed in claim 1, wherein ~~a the one layer with~~ has a higher refractive index and a ~~than a further layer with~~ of the multilayer interference filter with having a lower refractive index occur, and wherein a plurality of the one layer and the further layer occurs in alternation in the layer structure of the multilayer interference filter.

3. (Currently Amended) The high-pressure discharge lamp as claimed in claim 2, wherein the further layer of the interference filter having the lower refractive index preferably comprises ~~predominantly SiO₂~~, and the ~~second one~~ layer of the interference filter ~~is made of a material~~ further includes zirconium oxide having a higher refractive index than SiO₂, ~~preferably predominantly zirconium oxide (ZrO₂).~~

Claims 4-6 (Canceled)

7. (Previously Presented) The high-pressure discharge lamp as claimed in claim 1, wherein the high-pressure gas discharge lamp is a UHP lamp.

8. (Currently Amended) The high-pressure discharge lamp as claimed in claim 1, wherein ~~the material of the burner wall is made in particular of~~ comprises quartz, and accordingly the interference filter is capable of reflecting mainly infrared light in ~~the a~~ wavelength range from 2 μm to 5 μm .

9. (Previously Presented) A lighting unit comprising at least a lamp as claimed in claim 1.

10. (Previously Presented) A projection system comprising at least a lamp as claimed in claim 1.

11. (New) The high-pressure discharge lamp of claim 1, wherein

the portion of the coldest part provided with the multilayer interference filter has a higher temperature than a previous coldest spot prior to application of the multilayer interference filter on the portion.

12.(New) The high-pressure discharge lamp of claim 1, wherein the multilayer interference filter shifts a location of the coldest part.

13.(New) The high-pressure discharge lamp of claim 1, wherein the multilayer interference filter is configured to lower an operating temperature of the high-pressure discharge lamp by approximately 40°K.